

RESPONSE TO THE OFFICE ACTIONClaim Summary:

Claims originally present: 10-38.
Claims previously canceled: 1-9.
Claims previously amended: none.
Claims previously added: none.
Claims hereby canceled: 27-38.
Claims hereby amended: none.
Claims hereby being added: none.
Claims remaining: 10-26.

Amendment "A"

Please amend the Title as follows:

Please change the Title from [Fluid Ejection Device with a Composite Substrate]
to A Method of Fabricating a Fluid Ejection Device.

Please delete the abstract and insert the following new abstract:

A method of fabricating a fluid ejection device comprising: bonding a top surface of a first substrate to a bottom surface of a second substrate, wherein a patterned etch mask layer is formed on at least one of the top surface of the first substrate and the bottom surface of the second substrate; and etching a fluid channel in the first and second substrates extending through an opening in the patterned etch mask layer.

Please amend the Claims as follows:

1. (Previously Cancelled)
2. (Previously Cancelled)
3. (Previously Cancelled)
4. (Previously Cancelled)
5. (Previously Cancelled)
6. (Previously Cancelled)
7. (Previously Cancelled)
8. (Previously Cancelled)

9. (Previously Cancelled)

10. (Original) A method of fabricating a fluid ejection device comprising:

bonding a top surface of a first substrate to a bottom surface of a second substrate, wherein a patterned etch mask layer is formed on at least one of the top surface of the first substrate and the bottom surface of the second substrate; and

etching a fluid channel in the first and second substrates extending through an opening in the patterned etch mask layer.

11. (Original) The method of claim 10 further comprising thermally growing oxide on at least one of the top surface of the first substrate and the bottom surface of the second substrate to form the patterned etch mask.

12. (Original) The method of claim 10 further comprising heating the bonded substrates to thermally anneal them.

13. (Original) The method of claim 10 further comprising thinning the bonded substrates.

14. (Original) The method of claim 10 wherein the first and second substrates have different crystallographic orientations.

15. (Original) The method of claim 10 wherein the fluid channel is formed using a dry etch.

16. (Original) The method of claim 10 wherein the fluid channel is formed using a wet etch.

17. (Original) The method of claim 10 wherein the fluid channel is formed using dry and wet etching.

18. (Original) A method of fabricating a fluid channel for a fluid ejection device comprising:

bonding a top surface of a first substrate to a bottom surface of a second substrate, wherein the top surface of the first substrate has a feed trench;

etching a feed hole from a top surface of the second substrate to the top surface of the first substrate; and

removing a remaining portion of the first substrate to form a fluid channel through the substrates.

19. (Original) The method of claim 18 further comprising aligning the first and second substrates prior to bonding.

20. (Original) The method of claim 18 further comprising heating the bonded substrates to thermally anneal them.

21. (Original) The method of claim 18 further comprising thinning the bonded substrate.

22. (Original) The method of claim 18 wherein the first and second substrates have different crystallographic orientations.

23. (Original) The method of claim 18 wherein the feed trench and feed hole are formed using a dry etch.

24. (Original) The method of claim 18 wherein the feed trench and feed hole are formed using a wet etch.

25. (Original) The method of claim 18 wherein the feed trench and feed hole are formed using dry and wet etching.

26. (Original) The method of Claim 18, ~~further comprising~~ removing an intermediate layer disposed between the first and second substrates to fluidically couple the top surface of the second substrate to the bottom surface of the first substrate.

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)

End of Amendment "A"